

Docket No.: 123029-1057 (UHID 2003-031)

Patent

In The United States Patent And Trademark Office

In re Application of: Xiaolian Gao et al.

Serial No.: 10/553,328

Filing Date: Unassigned

Priority Date: April 14, 2003

Examiner: Unknown

Group No.: 1623

Confirmation No.: Not Assigned

For: Novel Reagent Compounds and Methods of Making and Using the Same

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

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(Only if Required Above)

I, the person signing below hereby state that:

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Translations of Foreign Documents

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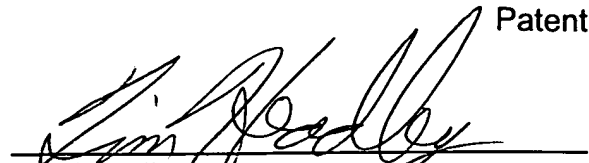
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Patent

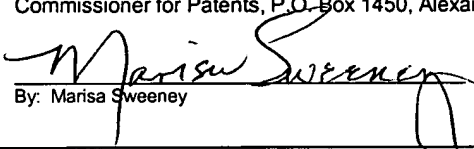
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CERTIFICATE OF MAILING

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I certify that the accompanying paper is being deposited with the United States Postal Service and sent "Via Express Mail" service under 37 CFR 1.08 on the date indicated above and is addressed to Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.


By: Marisa Sweeney

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Substitute for 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i> Sheet <u>1</u> of <u>5</u>	Complete If Known	
	Application Number	10/553,328
	Filing Date	Unknown
	First Named Inventor	Xiaolian Gao
	Art Unit	1623
	Examiner Name	
	Attorney Docket Number	123029-1057 (UHID 2003-031)

U. S. PATENT DOCUMENTS					
Examiner Initial	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	1.	6,107,479	08/22/2000	Natt et al.	
	2.	5,843,655	12/01/1998	McGall	

FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION						
Examiner Initial	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Country or Patent Office	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code*Number*Kind Code ⁵ (if known)				

Examiner Signature		Date Considered	
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	Art Unit	1623
	Examiner Name	
	Attorney Docket Number	123029-1057 (UHID 2003-031)

NON PATENT LITERATURE DOCUMENTS			T ²
Examiner Initial*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	
	3.	WASSERMAN, S.R., et al. Structure and reactivity of alkylsiloxane monolayers formed by reaction of alkyltrichlorosilanes on silicon substrates. <i>Langmuir</i> , 5, (1989) 1074-1087	
	4.	BALACHANDER, N. et al. Monolayer Transformation by Nucleophilic Substitution: Applications to the Creation of New Monolayer Assemblies. <i>Langmuir</i> , 6, (1990) 1621-1627	
	5.	PETRI, D.F.S., et al. An improved method for the assembly of amino-terminated monolayers on SiO ₂ and the vapor deposition of gold layers. <i>Langmuir</i> , 15, (1999) 4520-4523	
	6.	INGALL, M.D.K., et al. Surface functionalization and imaging using monolayers and surface-grafted polymer layers. <i>J. Am. Chem. Soc.</i> , 121, (1999) 3607-3613	
	7.	KATZENDLER, J., et al. The effect of spacer, linkage and solid support on the synthesis of oligonucleotides. <i>Tetrahedron</i> , 45, (1989) 2777-2792	
	8.	TEMSAMANI, J., et al. Sequence identity of the n -1 product of a synthetic oligonucleotide. <i>Nucleic Acids Res.</i> , 23, (1995) 1841- 1844	
	9.	FEARON, K.L., et al. Investigation of the 'n -l' impurity in phosphorothioate oligodeoxynucleotides synthesized by the solid-phase ~-cyanoethyl phosphoramidite method using stepwise sulfurization. <i>Nucleic Acids Res.</i> , 23, (1995) 2754-2761	
	10.	IYER, R.P., et al. Improved procedure for the reduction of N-I content in synthetic oligonucleotides. <i>Nucl. Nucl.</i> , 14, (1995) 1349-1357	

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	Filing Date	Unknown
	First Named Inventor	Xiaolian Gao
	Art Unit	1623
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	11.	MASKOS, U. et al. Oligonucleotide hybridization on glass supports: a novel linker for oligonucleotide synthesis and hybridization of oligonucleotides in situ. <i>Nucleic Acids Res.</i> , 20, (1992) 1679-1684	
	12.	GRAY, D.E., et al. Ellipsometric and interferometric characterization of DNA probes immobilized on a combinatorial array. <i>Langmuir</i> , 13, (1997) 2833-2842	
	13.	SHCHEPINOV, M.S., et al. Steric factors influencing hybridization of nucleic acids to oligonucleotide arrays. <i>Nucleic Acids Res.</i> , 25, (1997) 1155-1161	
	14.	GUO, Z., et al. Direct fluorescence analysis of genetic polymorphisms by hybridization with oligonucleotide arrays on glass supports. <i>Nucleic Acids Res.</i> , 22, (1994) 5456-5465	
	15.	PIRRUNG, M.C. et al. Comparison of methods for photochemical phosphoramidite-based DNA synthesis. <i>J. Org. Chem.</i> , 60, (1995) 6270-6276	
	16.	PIRRUNG, M.C. and Fallon, L. Proofing of photolithographic DNA synthesis with 3',5'-dimethoxybenzoinyloxycarbonyl-protected deoxynucleoside phosphoramidites. <i>J. Org. Chem.</i> , 63, (1998) 241-246	
	17.	PEASE, A.C., et al. Light-generated oligonucleotide arrays for rapid DNA sequence analysis. <i>Proc. Natl Acad. Sci. USA</i> , 91, (1994) 5022-5026	
	18.	MCGALL, G.H., et al. Light-directed synthesis of high-density oligonucleotide arrays using semiconductor photoresists. <i>Proc. Natl Acad. Sci. USA</i> , 93, (1996) 13555-13560	
	19.	BEIER, M. et al. Versatile derivatization of solid support media for covalent bonding on DNA-microchips. <i>Nucleic Acids Res.</i> , 27, (1999) 1970-1977	

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	Filing Date	Unknown
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	Art Unit	1623
	Examiner Name	
	Attorney Docket Number	123029-1057 (UHID 2003-031)

20.	Yu, D., et al. Diethoxy N, N-diisopropylphosphoramidite as an improved capping reagent in the synthesis of oligonucleotides using phosphoramidite chemistry. <i>Tetrahedron Letters</i> 35, (1994) 8565-8568	
21.	LEPROUST, E., et al. Characterization of oligodeoxyribonucleotide synthesis on glass plates. <i>Nucleic Acids Res.</i> , 29, (2001) 2171-2180	
22.	ECKSTEIN, F. (ed.) Oligonucleotides and Analogues, A Practical Approach. IRL Press, Oxford, UK, (1991) 109-135	
23.	FIELDS, G.B. (ed.) Methods in Enzymology. Academic Press, New York, USA, 289, (2001) Academic Press, New York, USA	
24.	SEARS et al. Toward Automated Synthesis of Oligosaccharides and Glycoproteins. <i>Science</i> 291, (2001) 2344-2350, American Association for the Advancement of Science, Washington, D.C. USA	
25.	HARRIS, J.M. et al. (ed.), Poly(Ethylene Glycol) ACS Symposium Series No. 680 (1997) American Chemical Society, Washington, D.C. USA	
26.	ARAKAWA, T. et al. Mechanism of Poly(ethylene glycol) Interaction with Proteins, <i>Biochemistry</i> 24, (1985) 6756-6762, American Chemical Society, Washington, D.C., USA	
27.	ZHU, X-Y., et al. Grafting of High-Density Poly(ethylene glycol) Monolayers on Si(111), <i>Langmuir</i> 17 (2001) 7798-7803, American Chemical Society, Washington, D.C., USA	
28.	KNOLL, E. et al., Unimolecular Beacons for the Detection of DNA-Binding Proteins. <i>Anal. Chem.</i> (2004) 76, 1156-1164, American Chemical Society, Washington, D.C., USA	

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Substitute for 1449/PTO <div style="text-align: center; font-weight: bold; font-size: 1.2em;"> INFORMATION DISCLOSURE STATEMENT BY APPLICANT </div> <div style="text-align: center; font-style: italic;"> (Use as many sheets as necessary) </div>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="2" style="text-align: center; font-weight: normal; font-style: italic;">Complete If Known</th> </tr> <tr> <td style="padding: 2px 5px;">Application Number</td> <td style="padding: 2px 5px;">10/553,328</td> </tr> <tr> <td style="padding: 2px 5px;">Filing Date</td> <td style="padding: 2px 5px;">Unknown</td> </tr> <tr> <td style="padding: 2px 5px;">First Named Inventor</td> <td style="padding: 2px 5px;">Xiaolian Gao</td> </tr> <tr> <td style="padding: 2px 5px;">Art Unit</td> <td style="padding: 2px 5px;">1623</td> </tr> <tr> <td style="padding: 2px 5px;">Examiner Name</td> <td style="padding: 2px 5px;"></td> </tr> <tr> <td style="padding: 2px 5px;">Attorney Docket Number</td> <td style="padding: 2px 5px;">123029-1057 (UHID 2003-031)</td> </tr> </table>	Complete If Known		Application Number	10/553,328	Filing Date	Unknown	First Named Inventor	Xiaolian Gao	Art Unit	1623	Examiner Name		Attorney Docket Number	123029-1057 (UHID 2003-031)
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